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GUEST FROM DOWN UNDER

Australian teacher
proves what friendship
is about

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CONSTITUTION BICENTENNIAL

Writing competition is
"a civics lesson for
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A selection of
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Montana Schools

OFFICE OF PUBLIC INSTRUCTION
Ed Argenbright, Superintendent

Teacher of the Year

*Mary Moe—a challenging and dedicated teacher with a
sense of humor—has earned the honor of her colleagues.*



Mary Moe, Montana Teacher of the Year 1987.

Doug Teddy

Columbia Falls High School English teacher, Mary Sheehy Moe, admits that she was not what one would call a model high school student. She was bright and energetic but rebellious and without a sense of constructive paths to success. The turning point came when her parents attended a school meeting, and Mary was on the agenda.

"The good news was that I had finally turned in an English assignment," Moe recalls. "The bad news was that it was a short story vividly portraying the murder of my English teacher."

Today Moe jokes with her own students that, after being a "crummy adolescent," she has come back to high school as a teacher, this time "to get it right" in a career she feels was inevitable. That she has "got it right" is a certainty for her students, colleagues, the community she serves and, now, her fellow educators across the state.

Mary Sheehy Moe is Montana's Teacher of the Year 1987. She is the state's candidate for National Teacher of the Year, a program co-sponsored by the Council of Chief State School Officers and the Encyclopaedia Britannica Corporation.

Helping her students assume responsibility for their own lifelong education is a priority in Moe's teaching philosophy, one she attributes to her own upbringing. "My parents believed and showed me through their example that one

person can make a difference," she said. "They believed that you were not put on this earth simply to better your own situation. You had something to contribute to others and a duty to do so."

She also is deeply committed to the subject she teaches. She believes that through their ability with language, students will improve their professional and personal lives and, through their understanding of the words of others, they will find identity and self-worth.

"I have the most important job in America. I teach English," she said. "I help students become total human beings who can have some control over the events in their lives because of their ability to use language."

"I may teach *A Man For All Seasons* until I'm crabbed with age. It is not the freshness of the material that is crucial, but the novelty of the response. If the material is provocative, in the better sense of the word, then the response will be ever new, and my students will not allow me to be an automaton going through familiar motions. They will make me think and grow, just as they are thinking and growing."

"Mrs. Moe is not an easy teacher," comments Michele Archie, a former student. "Her students appreciate the challenge she offers them and the level of performance she demands of herself and them."

continued next page



With a difficult election behind us and an uneasy feeling about the upcoming legislative session, I would like to focus on a few of the good things happening in education.

This issue of *Montana Schools* spotlights Montana's Teacher of the Year, Mary Moe. Mrs. Moe, an English teacher at Columbia Falls High School, and runners-up Ron Conrad of Dawson County High School, Glendive, and Roger Larsen of Glasgow High School are fine examples of the thousands of excellent teachers in our state. Many times we forget that the real business of education is done in the classroom, between teacher and students.

An excellent conference this fall highlighted business-school partnerships. In these trying times, such partnerships can make a difference for schools, and local business are interested in helping. As a result of this conference, General Motors will supply new engines for classroom use at secondary and vo-tech levels. This will be of special assistance to the Helena, Billings and Butte vo-tech centers, which provide training to auto dealers in their cities.

We currently are examining the possibility of establishing satellite demonstration sites whereby Montana schools, isolated as they may be, can receive national instruction programs through these telecommunication downlinks. More about this as work progresses.

We often use the media to focus on the outstanding performance of Montana students, who consistently score above average on national achievement exams. No matter how tough times may seem, we and others should be reminded about the excellent things happening in our schools.

All that good news aside, declining revenues have forced the Governor to impose a two percent reduction in the state budget. The share for elementary, secondary and vocational education will be about \$919,000, including \$537,000 in special education, \$160,000 from the vo-tech centers, and varying amounts for special education contingency, gifted and talented programs, pupil transportation and the OPI budget. The budget reduction in our office has meant further reorganization and elimination of administrative costs. One assistant superintendent position has been eliminated, and we have created the Department of Educational Services, which comprises the Basic Skills and Special Services staff and services.

As a special legislative committee looks at school funding and efficiency, committee members are learning more about the complexities of accreditation standards, the funding system, consolidation and retirement programs. The committee held a public hearing early this month, but results were not available when we went to press.

Our preparation for the upcoming legislative session concentrates on school finance reform to ensure that Montana schools continue to be able to provide the services Montanans want for their students. Funding is a basic responsibility of our legislature.

—Ed Argenbright
State Superintendent

Teacher of the Year, cont.

Colleagues agree that Moe's teaching is challenging. "She provides her students with a remarkable degree of motivation and personal responsibility," said Sonia Tettie, counselor at Columbia Falls High School. Howard Hunter believes Moe's inspiration is not inclusively for students, but also makes him more accountable in his job as a member of the district's board of trustees. "I appreciate her willingness to challenge me and demand that I grow in my own understanding of the education process," he said. He is impressed by Moe's dedication to provide the best possible education for the students of the district and her willingness to make the personal sacrifices necessary to achieve that goal.

Moe grew up in Billings and received her degree from the University of Montana. She has taught for 14 years, nine of them at Columbia Falls, where she has been a speech and drama advisor, coach in nearly every girls sport, English curriculum coordinator and Student Council advisor. As chair of the English department, she was instrumental in adding an advanced placement program and convinced her colleagues that writing in the content areas should be a department priority.

A curricular unit of her own creation, "Controversy in the

Classroom," has helped students develop the language skills needed in interpersonal communications, research, argumentation and writing style while analyzing current issues and controversies.

She has been president of the local affiliate of the Montana Education Association and has served on the Columbia Falls Local Government Study Commission and other community groups. She often is called upon to speak for the school and community, and her wit and eloquence have proved to be a morale booster in the demanding profession of teaching. Twice the high school students have asked her to be their commencement speaker.

The honor of being Montana Teacher of the Year has been great for the Columbia Falls community, Moe says, and a boost to other teachers at the high school. The student and teacher recommendations written for her nomination meant a great deal to her and reinforced her belief that professionalism should be honored.

She personally would rather have the responsibilities of being a teacher advocate rather than the award. "All teachers, especially retiring teachers, should get this kind of feedback."



Ron Conrad



Roger Larsen

TOY Runners-Up

Ron Conrad, English, speech and drama teacher at Dawson County High School in Glendive, is first runner-up Teacher of the Year.

Conrad's colleagues and students agree that he is an "extra mile" teacher who goes out of his way to help all of his students succeed. "Ron leaves his mark on young people," said fellow Dawson teacher, Mick Weist, who now teaches in Cody, Wyoming. "He understands how students learn and how to reach them educationally. More important, he treats them with respect and understanding. He is an unforgettable teacher."

Conrad has taught at Dawson County High since 1976, after teaching in Wibaux and Anamoose, North Dakota. He has chaired the school's English department for the past five years and has served on various curriculum committees and

community organizations. As drama coach, he has helped Dawson's forensics team win honors year after year, including three state championships.

Conrad's compassion for young people extends beyond academics through his work as co-advisor of the Rainbow Connection, a student drug and alcohol abuse prevention group, and membership in CORE, teachers who work with students with drug or alcohol problems.

"I enjoy teaching, and I want the students to enjoy being taught," Conrad said. "Student interest can be established by an atmosphere of excitement, teacher enthusiasm, energy and a pleasant approach to each experience. Curiosity should be encouraged by creative teaching, not wasted on busy work."

Ryan Conrad, a 9th grader at Dawson, pays his father the

MONTANA SCHOOLS

Montana Schools is published quarterly (September, December, February, May) by the Office of Public Instruction, State Capitol, Helena, MT 59620. It is distributed to public schools and members of boards, associations, organizations and individuals interested in education in Montana.

Deadlines are six weeks before the first day of the publishing month (e.g., six weeks before September 1).

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highest compliment "I was worried about going to high school because I didn't know how my friends would treat me with my dad in the same school," he said. "My dad told me not to worry because he would not embarrass me. He said that I would be free to be who I wanted to be. I can't wait to take a class from him."

Roger Larsen, second runner-up Teacher of the Year, teaches earth science, speech and drama at Glasgow High School. He has taught for 13 years in Montana and North Dakota schools.

Larsen's philosophy of teaching is founded on caring, a virtue ingrained in his own education. "I always felt that a majority of the teachers I had in school cared about me and knew what was going on with kids," he said. "I was impressed by the knowledge they had, their ability to understand us and their concern for our future. They cared, and I wanted to be somebody who cared, too."

"The number one priority for most teenagers in school is the desire to acquire the skills needed to cope with life," he

said. He believes those skills extend beyond a body of knowledge to practical applications as well. His students often are on field trips—astronomy observations, an archaeological excavation and other outings—and he has developed an earth science curriculum which is used statewide. Such efforts have made a big difference to students. "I can honestly say that he taught me to enjoy science for the first time in my school life," said former student, Kristie Kirkland.

Teaching should be a dynamic process, Larsen believes, with creativity, communication and student needs at its core. "Roger's teaching is not static. His teaching is alive and growing," said Ronald Stegmann, principal at Glasgow High. "He tries new ideas and techniques and is always looking for improvement."

TEACHER OF THE YEAR NOMINEES

Nominees for the 1987 Montana Teacher of the Year were: Al Anderson, Whitehall High School, Sherry Caruso, East

Junior High, Great Falls; Frank Guenther, Bozeman Senior High, Deborah Milne, Richey High School; Shirlee Morris, Belfry Elementary, Patti Ormiston, Elrod School, Kalispell; James Magera, Havre High School; Marlene Zorn, Anna Jeffries School, Cut Bank; Sid Wilson, Fergus High School, Lewistown; Beverly Townsend, Sun River School; Joanne Perkins, Custer County High, Miles City; Betty Jean Olson, Medicine Lake Elementary; Kathy Hill, Rimrock School, Billings; and Donald Johnson, Helena High.

The selection committee for the Teacher of the Year included Hal Stearns, Sentinel High School, Missoula, and Teacher of the Year 1986; John Fero, Principal, Jefferson School, Helena, and Montana Elementary School Principal of the Year; Jennifer Jeffries Thompson, Education Director, Montana Historical Society; Dr. Terry Wiedmer, Principal, Prescott School, Missoula; and Janet Athwal and Edward Eschler, curriculum specialists at the Office of Public Instruction.

TEACHER FROM AUSTRALIA EXTENDS INTERNATIONAL FRIENDSHIP

John Coverdale is a fine example of how the virtue of friendship can be a teacher's greatest asset. Coverdale, an Australian exchange teacher at Prescott School in Missoula, has received the unconditional, warm affection of students, who never let the idea of a "foreign" teacher sway their enthusiasm, and the full support of parents, colleagues and community.

Coverdale is at Prescott on an International Teaching Fellowship, which allows an Australian and American teacher to trade classes for a year. The exchange was arranged by the Montana Office of Public Instruction and the Ministry of Education in Victoria, Coverdale's home state. Teachers pay their own fare to their assignments and swap cars, houses, jobs and classes. They are paid by their own employers.

Coverdale took over the fourth grade class of Nancy Braun, who is teaching in his school in Traralgon, a southern Australia town of about 20,000 people. Next year, through the same fellowship program, Anaconda teacher Joe McCarvel will trade places with Janet Bedson of Weribee, Victoria.

Coverdale, a teacher with 22 years experience, has been at Prescott since January and will end his exchange this month. That term fits the school year in Australia, where children attend three equal terms during the calendar year. In 1987 the school year will change to four 10-week sessions with two weeks' break in between and a five- to six week summer vacation—summer "down under" being the same as the winter months in the northern hemisphere. The timing of the exchange has given two fourth grades at Prescott the opportunity to have an Australian teacher for half the school year. It also gave both Coverdale and Braun time for summer travel in their host countries.

Coverdale says that while Australian and American elementary school curricula are similar, school administrations differ. Here, the curriculum is determined by the board of trustees of a district that could include several schools. "In Victoria each school develops its own curriculum, sets policy and raises money for materials and activities," he said. "Larger schools have the option of selecting their own principal."

The school-based decision making is guided by a council of parents and teachers. Coverdale has served on his School Council in Traralgon, a group of 14 people for a student body of 440, and has been Council Secretary for the past two years.

Australian schools are financed by all taxpayers, with public funds allocated on the basis of the number of schools in a state and the number of students in a school. Schools may raise money to supplement those funds. The hiring, assignment and transfer of teachers is handled by the state's Ministry of Education. Teachers are certified for life and are evaluated only at their own request. After a period of teacher shortage, when many American teachers were brought to the country's schools, Australia now has a teacher surplus,

One student said, "I thought myself lucky to have an Australian teacher. He had a funny accent, but I got used to it."

Coverdale says.

Even before they met Coverdale, Prescott students were curious about having a teacher from another country. The notes they wrote several months afterwards recall that curiosity and the thrill of meeting someone new and different. "Before he came, I thought I would like him and I did," wrote fourth grader Aaron Bolton. "My Aussie teacher is not only nice, kind, but also very interesting. He taught us everything anybody ever wanted to know about Australia."

"At first I thought it was going to be weird because I thought he would talk in a foreign language," Scott Benedict wrote. "But I was wrong, of course. He was sincere. I thought myself lucky to really have an Australian teacher. He had a funny accent, but I got used to it."

All of the children were eager to learn about Coverdale's country. "I was very excited about Australia and [to] meet this stranger from the land down under," wrote Jennifer Olson. "At first I didn't even pay attention to know Australia existed. Now I know quite a lot."

The children have enlightened their parents about their teacher's country and culture by passing along what they have learned about Australia. Nearly every night of the school year, students have checked out the boomerang, Australian money, a football, posters and booklets on Australian Rules Football and other items that Coverdale brought from "over home." Their interest remains fresh, and Coverdale never tires of answering their questions.

"The parents, too, are very interested in Australia," he said. "Their acceptance of my teaching their children and the support of the school board, district, other teachers and Prescott's principal, Terry Wiedmer, have been impressive. It has been a very positive experience."

Coverdale and his country have extended the students' sense of the world beyond the borders of cultural insularity and nationalism; it's almost as if they had just discovered that the world is indeed round, complex and diverse, not flat and simple. The bond they will have with Coverdale is one of friendship and appreciation for all he taught them.

"I really enjoyed Mr. Coverdale," wrote student Kelly Clevenger, "and the best thing about Mr. Coverdale is that he is my favorite teacher." Indeed, there can be no better praise than that of his students—summed up by fourth grader Michael Harbine, "This is the best 1986 I have ever had."



John Coverdale, Australian exchange teacher at Prescott School, Missoula. "The parents' acceptance of my teaching their children has been impressive. My year in Montana has been a very positive experience."

CONTEST CELEBRATES CONSTITUTION

September 17, 1987, is the 200th anniversary of the signing of the U.S. Constitution. To celebrate this important occasion, the National Commission on the Bicentennial of the Constitution is sponsoring a student essay competition to focus young people's attention on how the Constitution protects our basic freedoms.

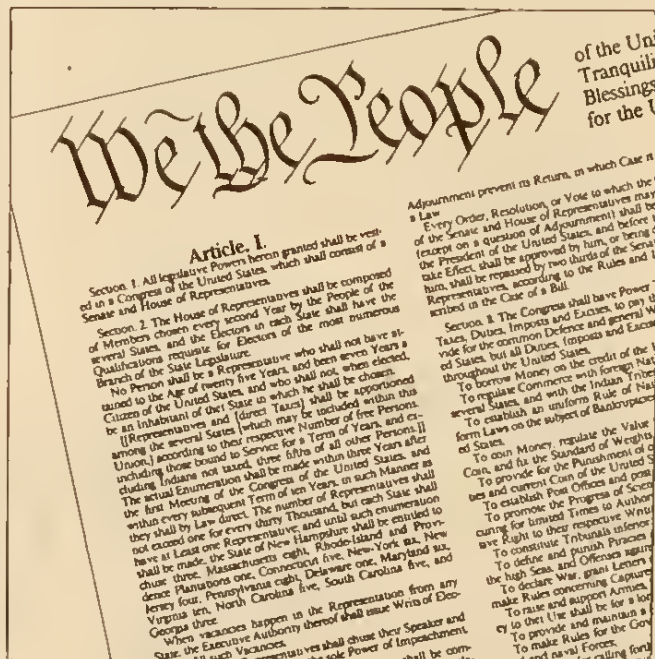
Participation in this writing competition "is one very important way in which [students] can help ensure that this commemoration of the Bicentennial of the Constitution is a history and civics lesson for all of us," according to former Chief Justice of the U.S. Supreme Court, Warren Burger, the Commission's chairman.

The national competition is open to all high school students in grades 9-12 during the 1986-87 school year. The national winner will receive \$10,000 and a trip to Washington, D.C., for honors from the president and government officials. Three winners will be selected from each state, the District of Columbia and the combined territories.

The competition topic is, "The Constitution: How Does the Separation of Powers Help Make It Work?" Entries must be limited to 1,500 words, excluding footnotes, and must be typewritten, computer-generated (double-spaced) or written in legible longhand in ink. All entries must be accompanied by an official entry form and must include the original essay and two copies.

Entries will be judged on the basis of depth and understanding and quality of analysis, accuracy and relevance of content, clarity of ideas and originality of presentation.

First place winners from the states and territories will receive \$1,000 and an expense-paid trip to Washington. Sec-



ond and third place state winners will receive \$500 and \$250, respectively. Certificates of participation will be awarded to all valid entrants.

The deadline for entries is April 15, 1987. For more information and official entry forms, send a postcard to the National Bicentennial Writing Competition, Box 50184, Washington, DC 20004-0184. Entries are to be sent to the

same address.

The national contest is sponsored by the Commission, the American Bar Association and USA/TODAY Gannett Company.

The State Office of Public Instruction and State Bar of Montana also plan to honor the Montana winners of the Bicentennial of the Constitution essay competition.

Montana's first place winner will receive \$200, second place will receive \$100, and third place will receive \$75. All three winners will be given a commemorative plaque from the State Bar of Montana and an expense-paid trip to Helena in summer 1987 for a special awards ceremony. The winners will make formal presentations of their essays to the Montana Supreme Court, which will meet in special session for the occasion.

In addition, local committees established by the State Bar and a state committee of lawyers, journalists, teachers and others will assist the national commission with the essay competition.

The essay competition is a unique opportunity for students to demonstrate their writing skills and philosophy and research abilities in an exercise that promotes understanding of America's most remarkable and enduring document.

For general information and a copy of the judging criteria, contact Rick Bartos, Legal Services, Office of Public Instruction, State Capitol, Helena, MT 59620 (444-4402). Please note that students must send their entries to the *national* committee (address above) and that all of the official competition materials are available only from the national office.

EQUITY MEANS EXCELLENCE

Through the Office of Public Instruction's efforts during the past few years, Montana has become nationally recognized for its exemplary education equity inservice for school districts. The Title IV/X programs have shown that infusing equity into the curriculum is simply a matter of good educational practice, and that equitable practices tend to enhance school program quality as well as professional skills. The training programs, which are designed to improve the quality of education for all students, not only ease the job of management and teaching, at the same time they enhance and sustain ongoing efforts rather than add to an already full educational agenda.

OPI's educational equity programs are: Gender Expectations and Student Achievement (GESA), a teacher training program that addresses gender disparate teaching practices; the Equity Principal, a series of workshops specifically structured for administrators; Everybody Counts/In Family Math, which involves parents and children in math activities; and Expanding Your Horizons in Math and Science, an opportunity for students in grades 6-12 to explore career options in technical fields.

These programs were selected for their suitability to statewide efforts to develop an inclusive approach to education. They can be integrated into rather than added on the curriculum, and they incorporate the "trainers training others to be trainers" structure so that districts are ensured local resources, growth and continuity. Each program is proactive and modeled on quality education practices. None requires heavy cash outlay.

Inclusive education means simply to include all children in the education process. It is not necessarily a mandate to change the recipe, but a matter of dividing the educational pie evenly. In short, inclusive education is an effort to guarantee that each student is given the same educational opportunities regardless of her or his gender, race, disability or economic status. GESA, the Equity Principal, Family Math and Expanding Your Horizons address the problem of differential student treatment and its effects on achievement. They help staff and administrators develop equitable and inclusive teaching practices.

Gender Expectations and Student Achievement in Science and Mathematics (GESA) began in Montana in June 1985, with four intensive training days for 35 elementary teachers from 11 districts. OPI subsequently held monthly regional workshops to address gender disparate practices in the three areas which directly affect a student's ability to achieve: teacher behavior, curriculum and materials, and the physical learning environment. Each GESA training session presented information and research for effective schools, including research which shows that teachers teach selectively in response to unconscious, prelearned gender biases and expectations. By so doing, they essentially exclude many students from instruction. The training incorporates established practices for successful staff development and stresses the importance of peer observation and coding the classroom.

The six training units cover major areas of gender disparate treatment of students and, within those themes, interactions and curriculum issues. Unit themes include instructional contact, grouping and organization, classroom control, enhancing self-esteem and competence, and evaluating student performance. Interactions are ways that teachers communicate with students, and GESA training helps teachers modify those interactions to enhance inclusive education practices. The curriculum issues strand of the workshop assists teachers in reducing gender bias in instructional materials and methods.

Thirty-two teachers have completed the training. They are now qualified GESA instructors, available as resource people within their districts. Eight Montana districts have initiated the course for 1986-87, and others are preparing proposals. Recertification credits as well as credit from the University of Montana and Northern Montana College may be earned for GESA training.

Training for K-12 teachers in additional school districts began in November. Many of those participating were selected from the teachers who were part of the University of Montana and Montana State University summer training sessions for the Excellence for Montana Mathematics Education (EMME) project. EMME, funded in part by a grant from the National Science Foundation, is a cooperative effort to provide

schools with inservice in elementary math curriculum development. From the fall cycle of GESA training, an additional 30 to 40 GESA facilitators are expected to be available to districts in 1987.

The recent focus on effective educational leadership has identified the school principal as the "gatekeeper" to curricular and instructional excellence. The Equity Principal, a series of workshops for school administrators, makes principals and other administrators more sensitive to equity issues so that they can help teachers perform without bias, choose instructional materials, develop curricula and create a school environment true to the principles of equity.

The Equity Principal gives participants an overview of equity concepts and research, increases their awareness of classroom disparity, expands observation and supervision skills to include equity issues related to curriculum and student-teacher interaction, and shares strategies, techniques and resources to improve student achievement.

Everybody Counts/In Family Math involves parents and their children (ages 5-18) in math activities that help people of all ages like and succeed in mathematics by working together. Family Math workshops have become extremely popular all over the country simply because they are fun. They break down the barriers of bias and fear about math and promote positive interaction among teachers, parents and children.

The fourth among the inclusive education programs coordinated by OPI also is a popular one. Each year, students in grades 6-12 attend a Saturday career conference designed to "expand their horizons" in math and science. The conference, held at 11 sites around the state, brings participants in direct contact with women working in a variety of technical fields and allows these professionals to inspire the young people with their experiences.

Expanding Your Horizons will take place in March and April 1987. Watch *Montana Schools* and other publications for further details.

If you would like to know more about these or other inclusive education programs, call Pat Christie at the Office of Public Instruction (444-5664).

ENERGY EDUCATION RESOURCES

Despite tight lesson schedules and the shortage of appropriate teaching materials, several thousand Montana elementary students are learning about energy conservation. They are benefiting from Conservation for Children, a teacher education and curriculum distribution project funded by the Montana Department of Natural Resources and Conservation (DNRC). This program, which provides energy materials and training to teachers, has been described by the U.S. Department of Education as "a program that works."

Energy experts say that a new energy crisis is likely within the next 25 years, when the children of today will be faced with the complex problems that accompany an acute energy shortage.

Even as energy prices decline, many educators agree that it is essential to prepare children for the energy realities of the future. Carla Wambach, a teacher at Hawthorne School, Helena, said, "I think it's important to teach energy—where it comes from and how to preserve it—in the primary grades. Kids are at the stage where they really care." Carol Woody, who teaches at Cascade School, remarked, "Children form opinions when they are very young. As they learn about energy, most youngsters accept the value of conserving for coming generations."

Energy education usually isn't a part of the curricula adopted by most school districts. It often is difficult for teachers to find good workbooks, lessons and other materials. They also find it increasingly difficult to fit "one more thing" into an already crowded schedule.

Conservation for Children was designed with these problems in mind. It requires no extra classroom time and can be used as part of basic skills instruction in language arts,

reading, math, social studies and science. The program's seven guidebooks can be used as supplementary materials and enrichment activities, or for skill review or units of study. Peggy Nelson, energy education coordinator at DNRC, said, "We encourage teachers to use Conservation for Children in the way that best meets the needs of their students."

"DNRC's goal during the first year of the project was to get the word out about the project, and to get teachers excited about Conservation for Children," Nelson said. To this end, DNRC contracted with the Montana Energy Education Council to conduct 14 teacher workshops. The more than 240 teachers who participated received free copies of the curriculum guides and attended two-hour sessions, often held immediately after school, in the evenings or as part of a PIR teacher training day. Workshops were held in Gallatin Gateway, Plains, Sunburst, Whitewater, Sun River, Wyola, Bozeman, Chico Hot Springs, Missoula, Lewistown, Lolo, Pablo, Great Falls and Columbus.

DNRC is sponsoring another round of Conservation for Children workshops during the 1986-87 school year. The two-hour workshops begin in December and run through May.

Conservation for Children is one of several energy education services offered by DNRC. It also offers a series of energy education workshops for teachers grades 7-12. These half-day workshops will be held in various Montana communities between January and May, 1987.

In addition, more than 40,000 copies of DNRC's free booklet, *Energy Activities with Energy Ant*, have been distributed to elementary schools. The Energy Ant booklet is

designed for use by students in grades K-4 for coloring, reading and learning about energy. The booklet also contains word games, crossword puzzles, riddles, cutouts and card games.

DNRC has reprinted the U.S. Department of Energy publications, *Science Activities in Energy*. These nine publications use simple, hands-on experiments to illustrate energy-related concepts. Topics are solar energy, wind energy, biomass, conservation, chemical energy, electrical energy and energy storage. Several of the publications are geared for students in grades 4-6, and others are for students in grades 9-12.

The *Montana Energy Resource Guide*, a compilation of energy information sources in Montana, also is available to Montana teachers. Another teacher resource is the Energy Film Library, which features more than 55 film titles and eight videotapes on energy topics.

DNRC has funded additional instruction materials for junior and senior high school classes. These materials include two computers that simulate home energy use. The simulators and accompanying materials are available on loan from the Montana Cooperative Extension Service.

If you would like more information about the Conservation for Children training sessions or any of DNRC's other energy education activities, contact Peggy Nelson at the Energy Division, Department of Natural Resources and Conservation, 1520 East Sixth Avenue, Helena, MT 59620 (444-6697).

NEWS BRIEFS

LEWISTOWN STAFF PROGRAM IS TOPS

The National Center for the Improvement of Learning has recognized Lewistown School District I as one of nine school districts in the country with an exemplary staff development program.

The award will be presented at the annual convention of the American Association of School Administrators in February. Lewistown also is one of three districts asked to make a presentation at the convention in order to make outstanding programs available to administrators from other states.

The Lewistown program was established in 1984 for teachers K-12. Sid Wilson, teacher at Fergus High School, is program coordinator.

CERTIFICATION REMINDERS

Certification Services at the Office of Public Instruction offers these reminders to ensure clarity and efficiency in teacher certification procedures.

Continuing education *units* will not be applied towards teacher certification. Be vigilant and discerning in taking coursework to ensure that academic *credits* are given.

All teachers should be aware of the difference between renewal and reinstatement to determine whether they should take the National Teachers Examination. For example, renewal of the Class 2 certificate requires one year of teaching experience and six quarter credits. When either of these requirements is not met, a reinstatement category results. All reinstatements must take the NTE in addition to academic requirements.

Three years of teaching experience are currently required for endorsement as a guidance counselor. Two of the three years must be obtained in a K-12 setting.

Credits for initial certification or renewal/reinstatement of teaching certificates must be acquired from fully accredited colleges. "Accredited" refers to colleges with a regional ac-

crediting association as a base. Probational or provisional approval by the accrediting association is not adequate for acceptance of college credits for certification.

If you are in doubt about the credits offered by a particular college, or any other certification matter discussed here, call Certification Services at 444-3150.

WHITEHALL VIDEO/SCIENCE HONORED

The U.S. Department of Education has recognized Videotaping Through Microscopes, a science media program at Whitehall High School, as an outstanding library media center program and winner of a National Exemplary Project award.

The project, created by teacher Al Anderson, involves the videotaping of microscopic studies so that more students may see the actual workings of science. Anderson developed the technique to add a new teaching strategy for biology classes and to use the school's video equipment more effectively.

A description of the program will be included in a publication describing National Exemplary Projects, which is disseminated to librarians throughout the country.

CHARACTERISTICS OF EXEMPLARY INDIAN STUDENTS EXPLORED

The Northwest Regional Educational Laboratory of Portland, Oregon, is undertaking a study of Native American students and the reasons for their success in school.

"A substantial number of Indian students are succeeding," the October 1986 NWREL newsletter, *The Northwest Report*, said. "These students, some of whom are gifted and college bound, are often described as leaders, survivors and achievers."

The first step of NWREL's Indian Education Program is to review research identifying the characteristics of successful Indian adults. The review will be presented to a panel of Indian educators, and the results of the entire study will be

published in a guide to assist educators in fostering characteristics linked with the success of Indian students in school.



VO-ED GRANT PROPOSALS SOUGHT

By early December secondary schools will have received information on applying for grants from the Carl Perkins Vocational Education Act. The federal grants are awarded to programs that upgrade, update and renew vocational education efforts in the state.

Completed proposals must be received by the Office of Public Instruction by January 19, 1987. The funds, most of which require a 50-50 match, will be available on July 1, 1987. All requests must be for extra funds to help students in their vocational programs.

The federal funds may be requested under 26 categories, including handicapped, disadvantaged, guidance, adult training and retraining, equipment and consumer/homemaking education. Judging from the 292 projects funded by the Perkins Act last year, the competition is least under the categories of handicapped and disadvantaged.

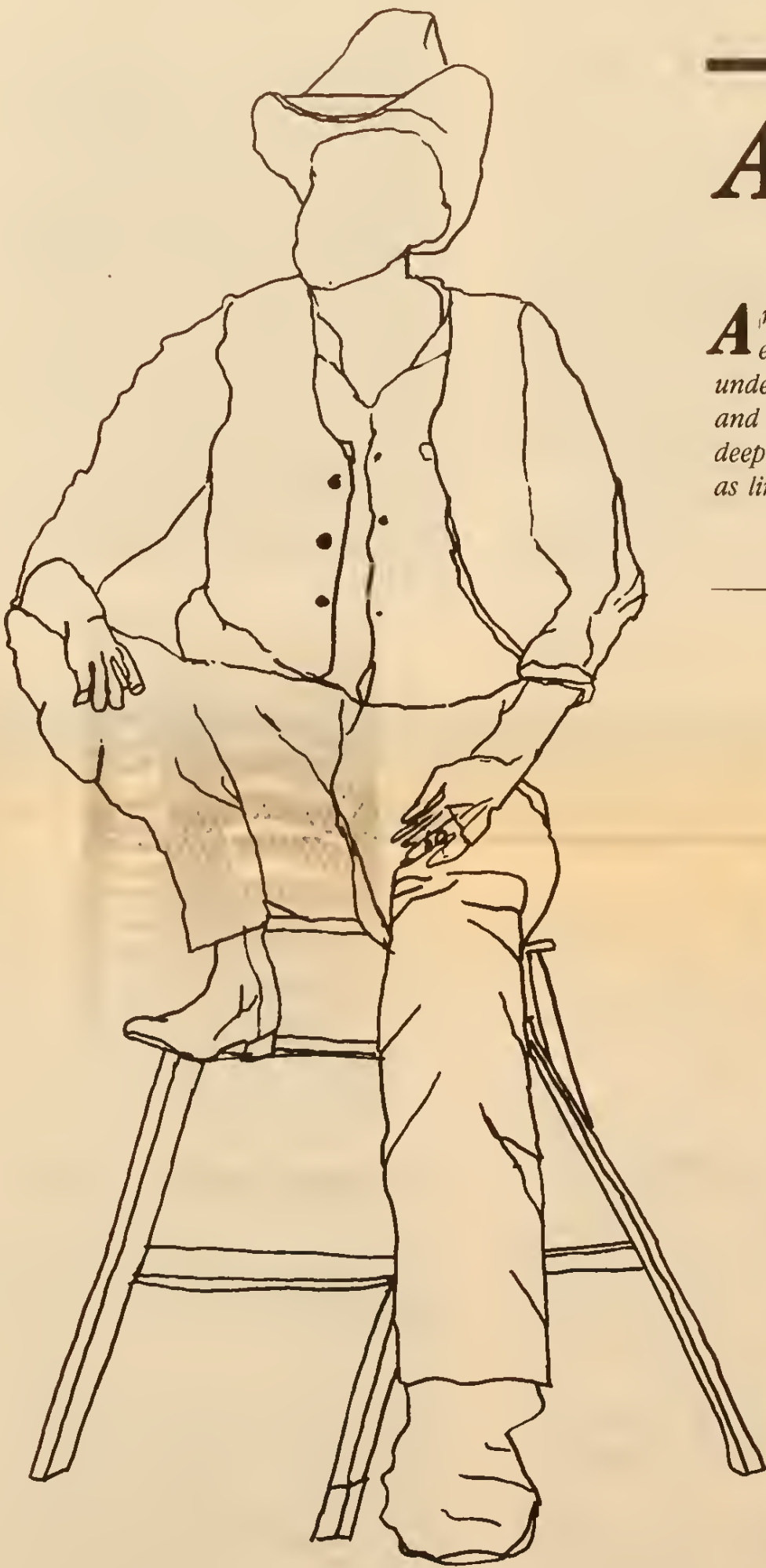
In general, a project proposal can be five pages in length. If five or six high schools could meet in one place, an OPI staff member could give technical assistance to persons interested in writing a project proposal.

If your school has not received information on the Perkins funds, contact the Department of Vocational Education Services at 444-4441.

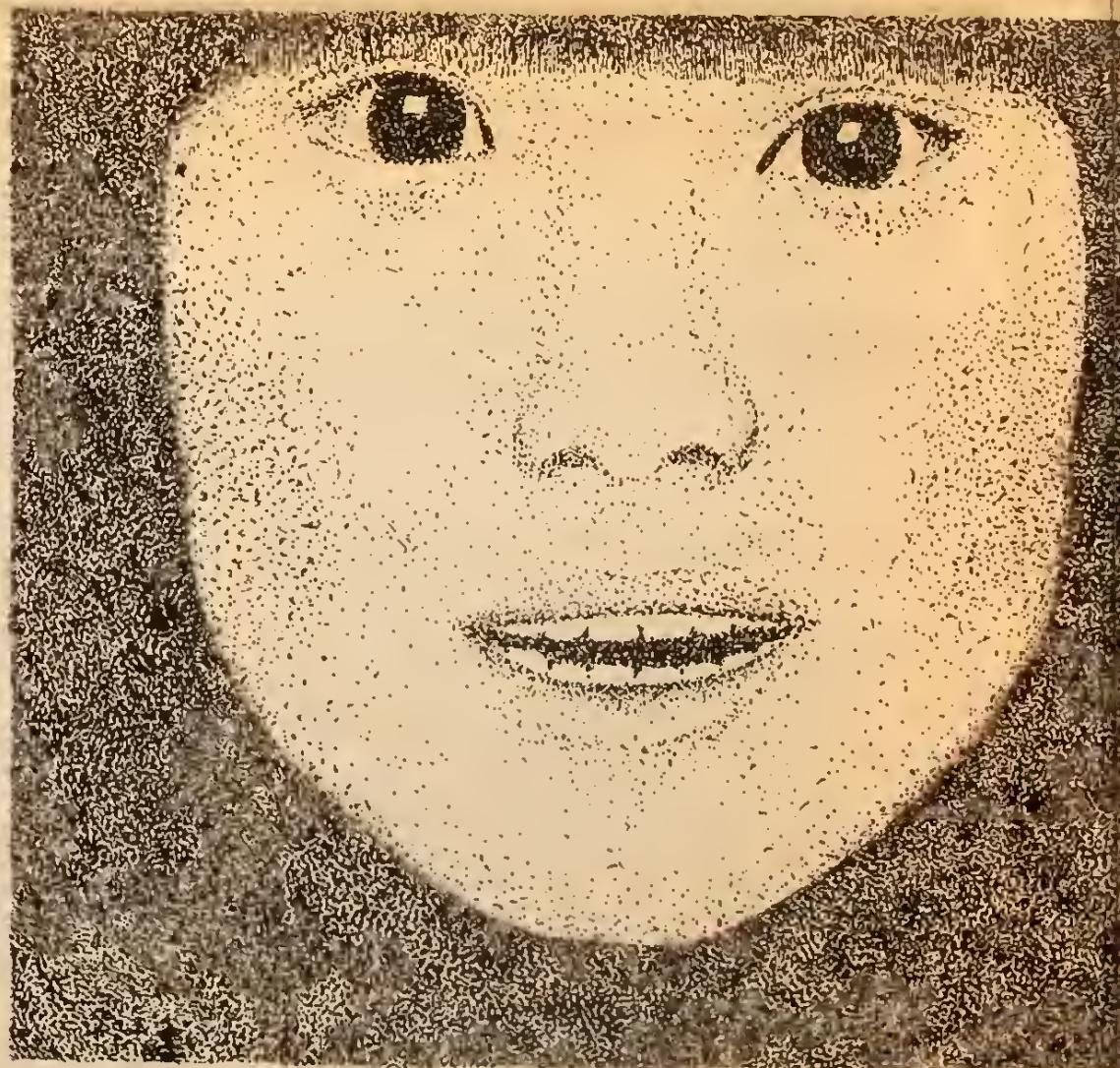
ART GALLERY

Art education...is basic because it extends our language. It enlarges the store of the images we use. It makes our understanding discriminating and comprehensive. Music, dance and the visual arts are languages that reach all people at their deepest and most human level. Thus, aesthetic literacy is as basic as linguistic literacy.

Ernest Boyer, President
Carnegie Foundation for the Advancement of Teaching



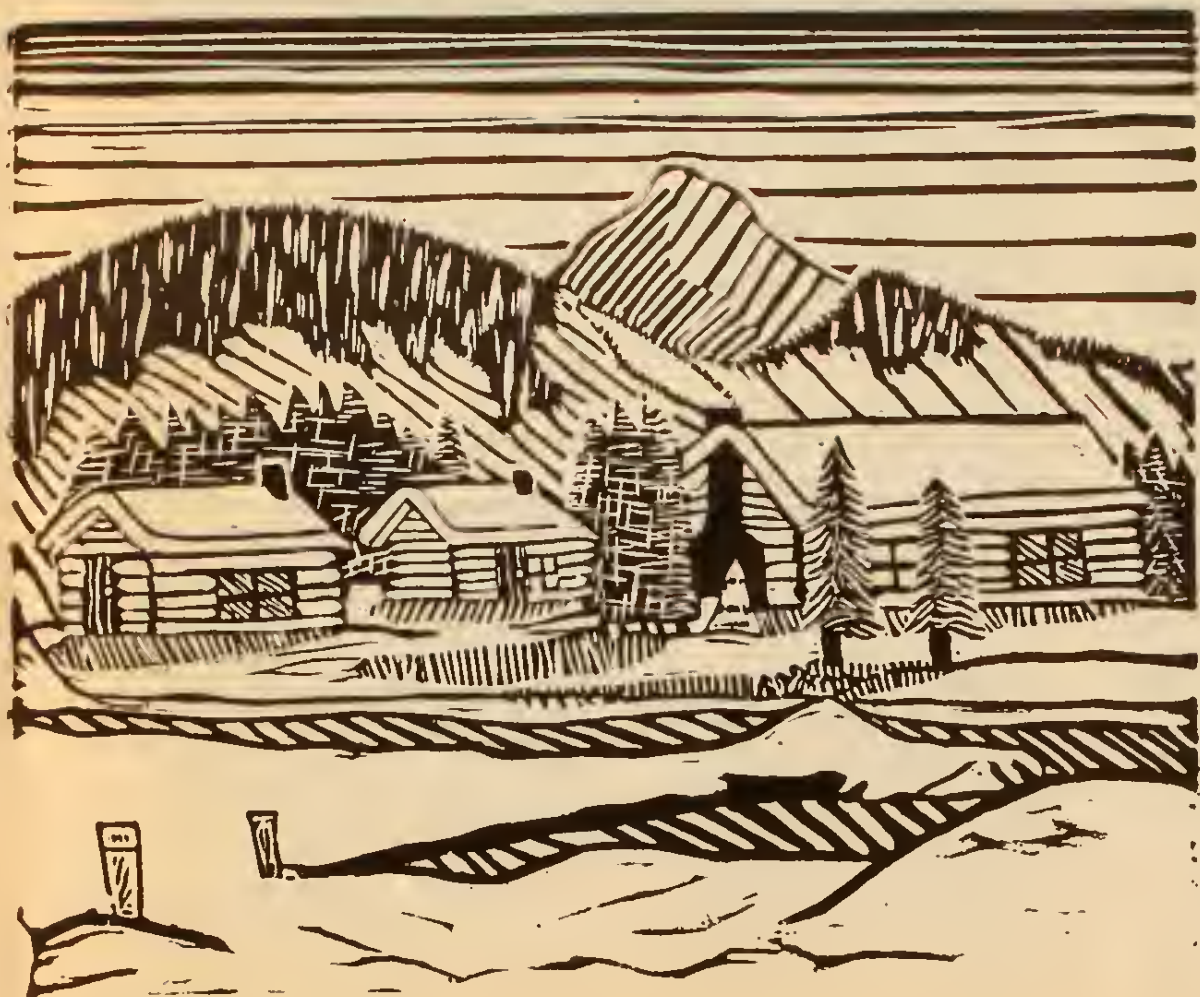
Annette Danford
Porter School
Missoula



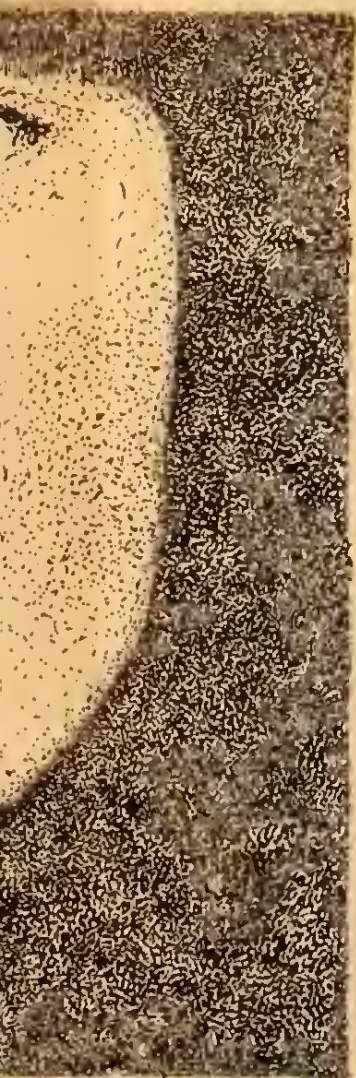
Paula Janetsk
Flathead High School
Kalispell



Clark Hyatt
Flathead
Kalispell



Clark Hjelseth
Flathead High School
Kalispell



Chris Kinerson
Russell School
Missoula



T.J. Kooren
Dickinson School
Missoula

RESOURCE NOTES

Resource Notes, by staff specialists at the Office of Public Instruction, give Montana educators a variety of useful information and access to important resources in specific subject areas. If you have any questions about what you read here or simply need assistance, call OPI 444-3095.

FOOD SERVICE

Cooperative Program Continues to Grow

The Cooperative Purchase program, in which the Office of Public Instruction acts as a broker to assist participating schools in food purchasing, continues to be successful. The September bid was awarded to Gamble Robinson of Billings for a low bid of \$501,574, about 2 percent lower than the bid of Continental-Keil. A total of 165 schools participated compared to 162 in September 1985. Purchase orders for food items to be included in the December bid were accepted through mid-October, and foods should be delivered before the first of February 1987.

More schools are taking advantage of these savings for their lunch programs. It is not uncommon for them to save from 30 to 40 percent on food ordered through Cooperative Purchase. Administrators are encouraged to compare the bid prices with the prices currently paid for the same types of foods.

OPI's Division of School Food Services determines which foods will be offered on the bid. Before it is included, each brand of food listed is carefully evaluated for quality and student acceptance. Each school food authority in Montana is then sent a letter describing the purchase procedure, the deadline for orders and the date on when the bid will be opened. The successful bidder receives the school's purchase order and is responsible for delivering that order. The bidder bills each school food authority directly, and the school has 30 days to pay.

Several schools have been chronically short of freezer space. But by purchasing through Cooperative Purchase, they can justify additional freezer space and pay for it with the savings gained through the program.

The next call for orders will be in April 1987 for the September 1987 bid. Those foods will be delivered in October.

What Is a Reimbursable Lunch?

A reimbursable lunch is: two ounces of cooked protein or its equivalent; two or more fruits and/or vegetables totaling at least a ¾-cup serving; one half-pint (eight ounces) of low-fat milk; and eight slices per week of bread or its cereal grain equivalent.

Under the "offer versus serve" policy, up to two components may be taken in reduced portions or refused completely, and still be a reimbursable lunch. Larger portions and seconds may be served, if school policy permits.

—H. Brisbin Skiles
Director, School Food Services

ARTS

Support for Art Instruction

In September, Secretary of Education William J. Bennett released *First Lessons*, a report on elementary schools. The report gives very positive support to arts education.

The report states that in specific curriculum areas, "The arts and instruction in the arts should be integral parts of every elementary school." The arts are "an essential element of education, just like reading, writing, arithmetic," the report said. "Music, dance, painting and theatre are keys that unlock profound human understanding and accomplishment." Other statements are: "Children should be handed these keys at an early age"... "We would all benefit by seeing arts in the larger context"... "For one thing arts can give coherence, depth and resonance to other academic subjects."

National Arts Education Alliance executive director, Thomas A. Hatfield, said, "This is an opportunity for growth and development of elementary art education in the nation. There are nine states now that have placed elementary art teachers in their schools, and thousands of local school districts have done so, too. Hopefully, this report will provide the momentum for other states to follow."

Teaching Fellowships in Australia

Arts teachers may apply for the 1987 Kennedy Center Teacher Fellowships, an international exchange between the U.S. and Australia that marks Australia's bicentennial.

Seven teachers from the disciplines of music, theatre, dance, visual arts, film and creative writing will pursue arts-related projects during the exchange. Candidates may apply themselves or be nominated by a group or individual. Minority and disabled participation is encouraged.

The deadline for applications is February 1, 1987. For application materials, contact: Alliance for Arts Education, Kennedy Center, Washington, DC 20566 (202-254-7190).

—Janet Atwal
Arts Education Specialist

PUPIL TRANSPORTATION

Drug Testing for Bus Drivers

Can we expect drug testing for school bus drivers in the near future? We may have to address this question before too long. Drug testing for some federal government employees is now a hot topic with the news media.

Because of their serious responsibilities, school bus drivers are prime candidates for drug testing. A Richmond, Virginia, school district now makes random drug testing mandatory for all of its school bus drivers. Dorsey Bus Inc., a contract operation in Oregon and Washington, is now testing its 600 school bus drivers, and expects to ter-

minate about 15 drivers. Drivers with "minimally positive" test results will be kept on probation and will be given tests later in the school year.

The Tulsa, Oklahoma, school board has started drug testing for school bus drivers, mechanics and teachers. Thirteen of the 270 tested so far were positive. None of the 13 were teachers. The school district believes that it is on firm ground in requiring the drug testing.

In the past month one school bus contractor has contacted me about a drug testing program for his drivers. The question of drug testing for school bus drivers in our state is now under study. If you have any comments or concerns, please let me know.

Advanced Driver Ed Workshops

Our eighth year of Advanced Driver Education workshops was very popular. We offered more workshops and trained more drivers—about 350—than ever before. School bus drivers, emergency medical technicians, law enforcement personnel, firefighters and highway department personnel participated. Almost everyone who completes the course believes that he or she will be better prepared to handle critical driving situations when behind the wheel of a vehicle.

OPI is now preparing to survey past workshop participants. If you haven't taken the Advanced Driver Education course yet, start making plans to get involved next summer. For more information, call 444-4396.

—Terry Brown
Pupil Transportation Safety Specialist



TRAFFIC EDUCATION

A Matter of Time

The Montana Highway Traffic Safety Division has begun a special effort to educate teenage drivers and passengers to influence their use of safety belts. Its slide presentation, *A Matter of Time*, brings a vital message to teenage audiences as part of this effort. The slide show and a demonstration of Montana's "seat belt convincer" are available to all traffic education programs in the state, free, on a first-to-request basis. Call Frank Montibeller at 444-3412.

A trip to Glendive is planned for next April or May. Schools in the Glendive area are encouraged to participate. Make your arrangements soon.

Tallgate Threat

According to Robert Barnett, we've been "steered" wrong on the safest distance between vehicles on the roadway. The stan-

dard advice is to allow two seconds of distance between your vehicle and the one ahead. That's based on "laboratory" studies. A new study says to increase the distance by at least another third of a second, based on the finding that it's harder—and takes longer—to gauge movements in the "real" world.

Teach those new drivers to keep their distance. The bumper you save may be your own.

NEA Reaffirms Driver Ed Support

One of the nine goals listed in the Preamble to the Constitution of the National Education Association is to "Advance the Cause of Education for all Individuals." The 1986 NEA Representative Assembly again cited driver education in a resolution, which reads: "[NEA] believes that fully funded classroom and behind-the-wheel driver education courses taught by a certified teacher should be part of the basic education of all students. The association urges its affiliates to support legislation that requires these courses in the curriculum."

Under a goal for protecting civil rights, NEA said it believes that "people should be protected from death and injury that result from the operation of motor vehicles by drivers under the influence of alcohol, drugs, or other mind-altering substances. To this end, the Association urges its members and affiliates to: a) Support enactment and enforcement of effective and equitable legislation regulating driving while under the influence, b) Advocate appropriate educational experiences for students regarding the effects of driving while under the influence, c) Support recognized community and school groups in their efforts to reduce death and injury from accidents caused by drivers under the influence and d) Support legislation requiring mandatory restraint of all passengers in motor vehicles."

—Curt Hahn
Traffic Education Specialist

HEALTH/P.E.

Physical Management Summer Seminar

Physical Management, a nationally validated workshop on weight management, will be held June 21-26, 1987, at the Circle 8 Guest Ranch 30 miles west of Choteau. The ranch is south of Glacier National Park and adjacent to the Bob Marshall Wilderness.

Participants will be trained in a weight control management program for themselves and/or students at elementary, junior high, high school or postsecondary levels. They will "live and learn" the program for one week, developing the proficiency to incorporate Physical Management within their school districts. Instruction includes: behavioral modification techniques, meal exchange planning, exercise prescription and self-concept development. The training and materials give the expertise necessary for body composition evaluation, physical fitness testing, dietary monitoring and group leadership.

This course is especially suitable for

RESOURCE NOTES

health and physical education, home economics and elementary classroom teachers, school food service personnel, school counselors, nurses and administrators interested in developing a program to help overweight students. Physical Management is nationally validated by the U.S. Department of Education and is a part of the National Diffusion Network's *Programs That Work*.

For more information or registration material, contact Spencer Sartorius, Office of Public Instruction, State Capitol, Helena 59620 (444-4434).

Project ACTIVE to Visit Montana

Project ACTIVE (All Children Totally Involved Exercising), the Office of Public Instruction, and Eastern Montana College will cosponsor a Project ACTIVE workshop June 11-13, 1987. The workshop gives teachers the materials and expertise for meeting the needs of atypical students. Two graduate credits may be earned from the workshop.

Project ACTIVE is a diagnostic/prescriptive physical education program aimed at developing motor skills and increasing fitness levels among physically limited students. It focuses on total body integration, mind and body being the key concept. Individual programs help students improve physical coordination, posture, motor ability, fitness, flexibility and other attributes of body integration. Although the program was developed to meet the needs of handicapped students, it is equally applicable to slow learners, normal and even physically gifted children.

Project ACTIVE is a nationally validated program described in the National Diffusion Network's *Programs That Work*. It has been successfully implemented in schools throughout the country.

The \$100 registration fee includes seven Project ACTIVE manuals and related materials. The fee for two graduate credits is an additional \$35. Joe Karp, Project ACTIVE Director from Kelso, Washington, is the workshop instructor.

For registration information, contact: Ron Lukenbill, NDN State Facilitator, Office of Public Instruction, State Capitol, Helena, MT 59620 (444-2080).

—Spencer Sartorius
Health, P.E., Recreation Specialist

MATH/COMPUTERS SCIENCE

Programming and Problem Solving

In the past few months, several journals have run articles about computer programming and its relationship to students' problem solving ability. Because mathematics and science teachers generally have some expertise in computers and thus have taken the lead as the "computer teacher" in most schools, they may find this issue of interest.

A widespread belief is that computer programming enhances students' higher thinking skills, develops their problem solving ability and improves mathematics achievement and understanding. However, studies

seem to contradict this assumption.

Education Week (March 1986) reports, "In spite of many contrary opinions, there appears to be a firm consensus that teaching computer programming does not teach problem solving skills across the disciplines."

The Alberta, Canada, Education Department study, *Integrating Programming into Mathematics*, evaluated a grade 11 math course which taught students to program in BASIC the solutions to typical math problems. "Students in the programming classes were not significantly different from those in the nonprogramming classes in mathematical understanding," the report said. "Interestingly, attitudes of the programming and nonprogramming students were not different in terms of the overall 'liking' of computers or perceived difficulty of computer use. Most significant is the fact that the students in the programming class were more negative about the usefulness of computers than the nonprogramming students."

A 1984 study by Bank Street College of New York looked at the relation between the teaching of Logo and improvement in problem solving abilities. The study found that "students do not learn to solve complex problems very well, nor do they appear to develop generalized problem solving skills as measured by tests designed to parallel the type of processes found in computer programs. Programming is not teaching students how to solve complex problems and is not teaching any evident general problem solving skills."

Other studies indicate a decline in the number of students in high school computer science classes. As more students use computers for content instruction at the elementary level, there is less interest in the computer as a programming device. Students are more interested in software application, whereby the computer becomes a tool. Word processing, databasing and accessing resources outside of the school appear to be more important than the study of programming.

Studies have shown that where students use the computer in math instruction, achievement increases. Teaching *with* the computer has definitely been shown to be more effective than teaching *about* the computer.

Summer Training Programs

Two mathematics leadership training programs will be held in summer 1987 at the University of Montana and Montana State University. These projects are funded through grants from the National Science Foundation to the Montana Council of Teachers of Mathematics and are cooperative efforts of MCTM, OPI and the University System.

The Excellence for Montana Mathematics Education (EMME) project is a leadership training program for elementary teachers K-8. Integrating Mathematics Programs and Computer Technology (IMPACT) is a special program to train mathematics teachers grades 7-12 to learn new techniques for integrating the computer as an instructional tool in the mathematics curriculum.

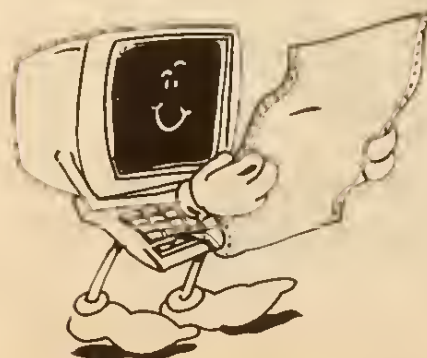
Teachers selected to participate in either program must have a minimum of three years teaching experience and an interest in

becoming an inservice leader in their district or region.

Participants attend six-week training programs at either site. Summer living expenses, travel and per diem, books, supplies and stipends are paid by the programs.

Program brochures have been distributed to all schools. Applications for both programs and more information can be obtained from Lyle Anderson, Mathematics Department, Montana State University; Rick Billstein, Mathematics Department, University of Montana; or Dan Dolan, Office of Public Instruction (444-4436).

The deadline for applications for both programs is February 1, 1987.



Math/Science Money Distributed

In October, \$61,000 was distributed to Montana school districts that applied for an allocation under the Education for Economic Security Act, or federal math/science legislation. Districts can use the funds for staff development in computer education, foreign languages, mathematics and/or science. The funds are available to districts through January 1, 1988.

Districts are reminded that 1985-86 funding distributed in the fall of 1985 must be spent by January 1, 1987. Final evaluation reports are due by January 30, 1987.

Under this federally funded program, the Commissioner of Higher Education recently distributed \$65,000 to Montana colleges and universities for several staff development programs. One foreign language, one computer/math/science, three math and three science programs were funded. Schools have been sent brochures describing these programs. Teachers from all schools are eligible to participate whether or not the district has received a state allocation for math/science dollars.

OPI also is presenting regional workshops for teachers grades 5-8 who are involved in teaching science for gifted and talented students. One workshop was given in Billings, and two others will be Great Falls and Missoula in January and February.

Six regional workshops on science safety will be presented in locations throughout the state. This special training is extremely important for all science teachers since it meets the requirements of the state's new "Right to Know" law, which mandates that all schools provide training for science teachers in the proper use and handling of certain chemicals and science materials.

For information on programs funded by the math-science monies, contact Bob Briggs, Science Specialist, OPI (444-4439).

—Dan Dolan
Math/Computer Ed Specialist

LIBRARY MEDIA

Random Notes to Inspire Librarians

Two librarians from Cherry Creek High School in Englewood, Colorado, won the Instructional Applications Award for Micros in the Media Center from the American Association of School Libraries (AASL). Their interdisciplinary computer lab, coordinated and staffed by the media center, was "the first to provide equal access for students to microcomputers and to provide a variety of software for their use," they said.

Want some good ideas on what you could put in your media center? According to *Classroom Computer Learning*, the 10 best selling programs currently are Print Shop, Newsroom, Bank Street Writer, Mastertype, Print Shop Graphics Library 1, Math Blaster, Word Attack, Crossword Magic, Early Games for Young Children and Kid Writer. Don't forget to add "Where in the World is Carmen San Diego?"—the best way yet to learn to use the *World Almanac!*

First Lessons: A Report on Elementary Education in America, by U.S. Secretary of Education William J. Bennett, says, "Every school should have a library, and every child should have and use a public library card." He also says the librarian should be an integral part of the instructional staff, leading children to good books.

Participants at the National Association of State Educational Media Professionals conference, which preceded AASL in Minneapolis this fall, prepared a position paper on school library media programs. The paper was presented at the Council of Chief State School Officers convention in November. It supports present programs and encourages continuing growth.

Concerned about library automation standards and the new CD-ROM technology? Concerned that your present microcomputer won't support CD-ROM? Concerned that you would like to join WLN but won't be able to subscribe to its new Laser Cat? Let your computer dealer know! School libraries, in general, are committed to a different technology than are public and academic libraries. Let your dealer know that you will be "out in the cold" when it comes to the new CD-ROM technology!

—Margo Rolando
Library Media Specialist



Unclassifieds is a bulletin board of resources, events and announcements of interest to educators. The naming of a service or product does not mean a recommendation or endorsement by the Office of Public Instruction

INTERNS/STUDY ABROAD

Teacher Interns From Japan

The International Internship Program invites Montana schools to host a teacher from Japan. Public and private school teachers, university students majoring in education and individuals with extensive training in Japanese culture serve as guests or teaching assistants in American schools, where they observe education methods and instruct students in traditional Japanese arts and culture. School districts are not responsible for compensating the interns.

Schools interested in hosting a Japanese teacher should contact the program before December 20: International Internship Programs, 401 Colman Bldg., 811 First Ave., Seattle, WA 98104.

Shakespeare Study

Western Washington University is offering its annual Shakespeare and Stratford tour for teachers, students and others. Four credits in speech may be earned for poetry and drama study through a course designed for all Shakespeare enthusiasts.

For more information on this summer 1987 event, contact Dr. Arthur Solomon, Dept. of Speech and Broadcast, Western Washington University, Bellingham, WA 98225.

EVENTS

March is Women's History Month

March 1987 is Women's History Month, a time to help students become more familiar with the many women who have affected our communities and nation throughout history. Contact the National Women's History Project, Box 3716, Santa Rosa, CA 95402, for a catalog, poster and other information on curricular activities.

Ag Week in Montana: Poster and Essay Contests

Agriculture in Montana Schools invites teachers and students to celebrate Agriculture Week in Montana, March 15-21, 1987, by entering poster and essay contests for students grades K-11. The events are sponsored by AMS, Lehrkind's Coca Cola Bottling Company and the State Department of Agriculture.

Students in grades K-6 may enter posters on the theme, "Agriculture: Food and Fiber," with cash prizes awarded for the best entries. An essay contest for grades 7-11 invites students to write about "Future Careers in Agriculture-Related Businesses."

The winners of the essay contest will participate in a five-day summer workshop at MSU in Bozeman, which also includes continuing education courses for interested teachers.

Entries for the poster and essay contests must be postmarked no later than March 1, 1987. Send entries to or seek further information from: Nina Baucus, AMS President, PO Box 167, Wolf Creek, MT 59648

AWARDS/COMPETITIONS

Student Essay Contest

All high school students are invited to participate in the 1987 Swackhammer Prizes by entering an essay on the topic, "Three Steps My Family and I Can Take Now to Encourage World Peace." The contest seeks suggestions for constructive approaches to the problems of war and peace. Cash prizes for first, second and third place will be awarded.

For rules and procedures, write: Nuclear Age Peace Foundation, 1187 Coast Village Road, Suite 123, Santa Barbara, CA 93108.

Science Programs for Students

The U.S. Department of Energy will sponsor several institutes for high school students in summer 1987. You may be interested in telling your students about the following.

DOE High School Supercomputer Honors Program—A hands-on experience with one of the world's supercomputers, at the Lawrence Livermore National Laboratory in Livermore, California. Program includes student programming project, problem solving and other activities.

DOE High School Honors Research Program—Studies at the National Synchrotron Light Source, the world's brightest source of x-ray and vacuum ultraviolet radiation, at the Brookhaven National Laboratory in Upton, New York.

Honors Program in Particle Physics—Studies in energy particle physics at the Fermi National Accelerator Laboratory, Batavia, Illinois.

DOE Berkeley Lab High School Honors Program in Life Science—Hosted by the Lawrence Berkeley Lab at the University of California, Berkeley, this program brings together outstanding students for study in biology, biotechnology, chemical biodynamics and biomedical research.

For more information, contact Bob Briggs at the Office of Public Instruction, or write the U.S. Dept. of Energy, Washington, DC 20585.



EQUIPMENT

Lunch Plates For Sale

Evergreen School District 50, Kalispell, has for immediate sale approximately 800 melamine-type hot lunch plates in brown and green. If you are interested, contact Carmen Fenster at the school district (752-0101).

Student Compasses

King Tool Inc. of Bozeman has a "safer" compass for students in math classes. The compass is used to draw arcs and circles and, according to King Tool, is less likely to inflict injuries because of its protected tip. For information, contact King Tool Inc., 5350 Love Lane, Bozeman, MT 59715.

COURSES

Ag Course Comes To You

Agriculture in Montana Schools is offering a one-credit continuing education class in cooperation with the Continuing Education Department at Montana State University. A continuing education teacher will meet anywhere in the state to conduct the 10-hour class with a group of 12 or more teachers. The course covers AMS materials for teachers grades K-8.

The class fee is \$35 for one credit or auditing, payable to MSU, plus \$5 for AMS materials. For information, contact Nina Baucus, AMS President, PO Box 167, Wolf Creek, MT 59648 (458-9468), or Connie Townsend, PO Box 662, White Sulphur Springs, MT 59645 (547-3453).

Organizing For Industry-Education Cooperation

The National Association of Industry-Education Cooperation offers a training program for local industry and education representatives who wish to establish a framework for long-term industry-education cooperation. The program focuses on the careful planning, organization, implementation and evaluation of long-term alliances

aimed at making academic and vocational education more responsive to student and employer needs.

For information on sponsoring a training session, contact NAIEC, 235 Hendricks Blvd., Buffalo, NY 14226 (716-834-7047).

RESOURCES

World Book Matches Funds For School Purchase of Encyclopedia

"Partners in Excellence Read-A-Thon," sponsored by World Book Encyclopedia, offers students an opportunity to raise money for the purchase of an encyclopedia set through efforts that stimulate their reading skills. Students sign up seven sponsors, read seven books and in seven weeks raise enough money to purchase an encyclopedia at a price supplemented by funds from World Book.

The program begins with a faculty introduction. Call Nancy Jean Smith in Deer Lodge (846-2776).

Teenage Drug Abuse Prevention Program

Montana's Lions Clubs, in cooperation with the Quest National Center, introduce "Skills for Adolescence," a school program designed to confront teenage drug abuse by stopping the problem before it starts. Schools may treat the program as a separate course for students grades 6-8, or incorporate it into an existing class. The program involves parents and teachers in helping students develop positive self-esteem and sound decisions about drugs and alcohol. For information, contact Charles Hensley, PO Box 2011, Billings, MT 59108, or Bryan Hall, Box 359, Pablo, MT 59855.



UNCLASSIFIEDS

Curricular Series For Study of Montana's Natural Resources

The second edition of *Montana's Natural Resources*, a seven-chapter set of booklets about our minerals, grasslands, forests, water, soils, wildlife and wilderness resources, is now available to schools from the State Department of Natural Resources and Conservation.

The series gives a general background on each major resource and explores its historical importance and present use. Each chapter is illustrated with maps, schematic drawings, photographs and sketches. A reading list and suggested classroom activities are included.

The booklets are being used in schools throughout Montana, as well as in the conservation education programs of several conservation districts. They are suitable for grades 6-12, and provide a comprehensive but compact source of materials specific to Montana.

The set is available from the Department of Natural Resources and Conservation, 1520 E. 6th Ave., Helena, MT 59620, for \$2.75 plus postage.

Columbus Returns

The Montana Council of Teachers of Mathematics recently published *Columbus Returns*, 36 of the best activities from the Columbus Math Lab project for junior high students. The materials were selected by teachers who have used the Columbus project for the past several years.

The booklet can be obtained from MCTM for \$5. Contact Mary Buck, C.R. Anderson Middle School, 1200 Knight Avenue, Helena,

MT 59601, or Dan Dolan, Office of Public Instruction, State Capitol, Helena, MT 59620 (444-4436).

Gift Certificate Stimulates Math Skills

The National Council of Teachers of Mathematics offers free copies of *Using Calculators to Improve Your Child's Math Skills*, booklets to encourage parents to help their children develop math skills. Free gift certificates entitling a family to receive one of these booklets can be distributed at parent night, PTA meetings or other occasions.

For free gift certificates, contact Dan Dolan, Office of Public Instruction, State Capitol, Helena, MT 59620 (444-4436), or NCTM, 1906 Association Drive, Reston, VA 22091.

Columbus Math Project Materials

Math curriculum materials from the Columbus Math Lab project for junior high students are once again available from the Office of Public Instruction.

The reprinted materials include math curriculum objectives for grades 7-8 and a booklet of activities for each grade, such as alternatives to drill and practice, problem solving, lessons for calculator use, and math content-related games. All of the activities are keyed to curriculum objectives and are designed to increase student interest and positive attitudes towards math. The black and white format is easily duplicated.

A complete set can be obtained for \$20, including postage and handling. Contact Dan Dolan, Office of Public Instruction, (444-4436).

Annette Parsons
Wibaux Elementary



Season's Greetings

from Ed Argenbright
State Superintendent of Public Instruction
and his staff

BRIGHT IDEAS

COMMUNITY TV IN RURAL MONTANA

School-business partnerships have recently been the focus of a great deal of attention. Rural areas are aware of the benefits of such cooperation but, with limited numbers of large businesses and industries, how do their schools reap those benefits? A community education project in Libby is an innovative solution.

Until 1983 the information media for this small northwestern Montana town consisted of local newspapers, a radio station and regional sources. Then two needs "found one another" and changed the situation. Libby residents wished to be better informed about local affairs, and a local cable TV company wanted to offer an open slot on its system for a community television station. The result is Libby Community Television, Inc. (LCTV), the town's own public TV station.

Today LCTV airs meetings, local events, classes, interviews, health seminars and other programs to 85 percent of Libby's residents. Any cable subscriber can receive the broadcast.

LCTV is run by a board of directors com-

posed of representatives from Northwest Montana Human Resources, the cable TV company, school district library media services, county extension office, the local radio station, Kootenai National Forest, human services and the school district's community education program. A part-time technical employee works in development and production, assisted by volunteers.

LCTV is operated on pooled resources. A grant from Northwest Montana Human Resources was initially used to purchase equipment and training; the school district provides administrative services and studio and office space, complete with furniture donated by a local store; the Forest Service office at Kootenai National Forest shares video equipment and provides technical assistance; Libby Cablevision made it possible to open the channel to local broadcast; and the Chamber of Commerce coordinated interest surveys of residents as the project began.

To date, over 2,000 homes in the Libby area have received six to eight hours a week

of instructional programming via LCTV. Health services, the county extension office, schools and others have shown programs on how to get a job, legislative updates, the Distar reading program, fire safety promotion and other subjects. LCTV aired a public hearing on the proposed drawdown of Libby Dam by the Army Corps of Engineers, a forum on the local school mill levy and other local events. Because of LCTV, community awareness about services and issues in the Libby area has increased significantly.

LCTV organizers learned early that community support and access were important. Knowing it was foolish to try to compete with prime time, they scheduled their shows Mondays through Thursdays during non-prime-time hours. They promote the use of video techniques as an artistic expression and keep to issues, events and educational programs of interest to their citizens. LCTV is governed, operated and funded by community sources.

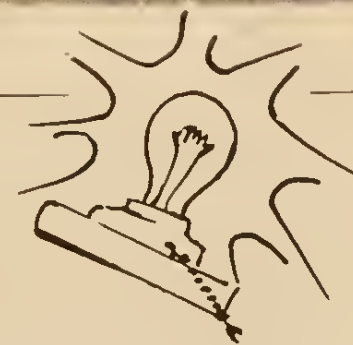
Just about any community with access to cable TV service and citizen support can start a program like LCTV. Many already

have, and about 30 in the Northwest region belong to a network in which video productions and ideas are exchanged. The video sharing allows a station to expand its programming without having to pay the high costs of production.

LCTV continues to improve its service to the community. It is truly a collaborative effort to enhance the educational and informational opportunities in a rural community.

For more information, contact Harley Paulson, Community Education Director, Libby Public Schools, 111 E. Lincoln Road, Libby, MT 59923.

Submit your teaching philosophy, point of view or a classroom idea for possible publication in Montana Schools. Maximum 250 words, typed, double spaced. Include name, position, address. Send to: Montana Schools, Office of Public Instruction, State Capitol, Helena, MT 59620.



TRAINING OPPORTUNITY CALENDAR

The following are professional enrichment opportunities of interest to school personnel. For information about the calendar or inclusion of items, call Florence Anderson at OPI (444-2417). For information about specific listings, address inquiries to the contact person noted.

Units of the Montana University System and other colleges offer professional training courses through their offices of continuing education. Contact the specific college or university for information.

Each item in the calendar is in the following order: date, type of event, title, location, contact person, telephone number. In some cases, preregistration may be required. The calendar is current as of November 15, 1986.

DECEMBER

Dec. 15—Teleconference: *Men and Women Communicating—At Work and Beyond*, 11 a.m. Montana time, Space Net 1, Transponder 1, Audio 6.8, Pat Christie, OPI, 444-5664.

JANUARY 1987

Jan. 9—Workshop: *Equity Standard 109 for Trustees, County Supts., Administrators and Title IX/504 Coordinators*, Helena. Pat Christie, OPI, 444-5664.

Jan. 19—Deadline: *Carl Perkins Vo-Ed Grant Proposals to Office of Public Instruction*. Bob Ruthemeyer, OPI, 444-4449.

Jan. 19-20—Workshop: *County Superintendents Workshop*, Helena. Gile Mitchell, OPI, 444-3159.

Jan. 19-20—Meeting: *Board of Public Education*, Helena. Claudette Morton, 444-6576.

Jan. 20—Martin Luther King's Birthday.

Jan. 23-24—Conference: *Curricula for Gifted/Talented*, Houston, Texas. Nancy Lukenbill, OPI, 444-4442.

Jan. 26-30—Workshop: *Alcohol/Drugs—Working With Adolescents in Schools and the Community*, Great Falls. Community Intervention, Inc. and Great Falls Community Core Team, 761-6680.

MARCH

Women's History Month
Youth Arts Month
Music in Our Schools Month

Mar. 2-3—Workshop: *Conducting and Initiating an Independent Study Program for Gifted/Talented Students*, Phoenix, Arizona. Nancy Lukenbill, OPI, 444-4422.

Mar. 3-4—Workshop: *Improving Productive Thinking of the Gifted/Talented*, Chicago. Nancy Lukenbill, OPI, 444-4422.

Mar. 4-5—Conference: *Meeting the Needs of At Risk Youth*, Portland, Oregon. Rex Hagans, NWREL, 503-248-6800.

Mar. 5-6—Meeting: *Board of Public Education*, Helena. Claudette Morton, 444-6576.

Mar. 15-21—Event: *Ag Week in Montana*. Nina Baucus, 458-9468.

Mar. 19-20—Workshop: *Meeting the Psychological/Affective Needs of the Gifted/Talented*, San Francisco. Nancy Lukenbill, OPI, 444-4422.

Mar. 21—Conference: *Expanding Your Horizons in Math and Science: Career Options for Girls Grades 6-12*, Butte. Pat Christie, OPI, 444-5664.

Mar. 28—Conference: *Expanding Your Horizons in Math and Science: Career Options for Girls Grades 6-12*, several locations. Pat Christie, OPI, 444-5664.

APRIL

April 2-4—Conference: *State FFA Leadership Conference*, Billings. Leonard Lombardi, OPI, 444-4451.

April 3-4—Conference: *Mountain-Plains New Agenda: Future Directions for Girls and Women in Sports*, Bozeman. Dr. Ginny Hunt, MSU, 994-3945.

April 9-11—Conference: *Montana Assoc. of Gifted/Talented Education*, Great Falls. Mike Anderson, White Sulphur Springs, 547-3751.

April 11—Conference: *Expanding Your Horizons in Math and Science: Career Options for Girls Grades 6-12*, Bozeman. Pat Christie, OPI, 444-5664.

April 12-14—Conference: *MT Assoc. of Secondary School Principals*, Lewistown. MASSP 442-2510.

April 20-21—Meeting: *Board of Public Education*, Great Falls. Claudette Morton, 444-6576.



THE MOUNTAIN-PLAINS NEW AGENDA

Future Directions for Girls and Women in Sports

First ever conference designed especially for coaches, teachers, administrators, parents, and student athletes in Montana, North Dakota, South Dakota, and Wyoming.

**April 3-4, 1987
Bozeman, Montana**

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Association Hall of Fame

JAQUELINE BERNING
Nutrition Consultant
Denver Broncos

CAROLE OGLESBY
Sports Psychologist
Temple University

CHRIS SHELDON
President, National Assoc. for
Girls and Women in Sports

DOLORES GRAYSON
Los Angeles County
Equity Consultant

BILL NEVILLE
Montana State University
and former Olympic
volleyball coach

DR. ESTELLE RAMEY
Professor of Physiology
and Biophysics
Georgetown University
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